



# LESSON PLANS

## UNIT 2 SECTION 4 ACROSS THE CURRICULUM (MATH)

Investigation - "Conversions That Make Cents"

### Student Objectives

The student will:

- synthesize data to complete a table.
- compare and contrast typical costs of vehicles using various fuels.
- determine causes and effects of converting vehicles to use an alternative fuel.

### TAAS Objectives

The student will:

- use the operation of addition to solve problems.
- use the operation of subtraction to solve problems.
- use the operation of multiplication to solve problems.
- use the operation of division to solve problems.
- estimate solutions to a problem situation.
- determine solution strategies and will analyze or solve problems.
- express or solve problems using mathematical representation.
- evaluate the reasonableness of a solution to a problem situation.

### TEKS

(8.2) **Number, operation, and quantitative reasoning.** The student selects and uses appropriate operations to solve problems and justify solutions.

The student is expected to:

- (a) select and use appropriate operations to solve problems and justify the selections;
- (b) add, subtract, multiply, and divide rational numbers in problem situations; and
- (c) evaluate a solution for reasonableness.

(8.5) **Patterns, relationships, and algebraic thinking.** The student uses graphs, tables, and algebraic representations to make predictions and solve problems.

The student is expected to:

- (a) estimate, find, and justify solutions to application problems using appropriate tables, graphs, and algebraic equations.

(8.14) **Underlying processes and mathematical tools.** The student applies Grade 8 mathematics to solve problems connected to everyday experiences, investigations in other disciplines, and activities in and outside of school.

The student is expected to:

- (a) identify and apply mathematics to everyday experiences, to activities in and outside of school, with other disciplines, and with other mathematical topics.